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ABSTRACT

Four years after the inception of a school desegregation busing program, the average reading achievement test scores of the bused pupils showed the same trends as those among the receiving pupils and pupils at unaffected schools. Tests scores among all kindergarten pupils showed an upward trend, as well as scores in the first, second, and third grades. The changes which have occurred are held to be probably due more to other factors than to desegregation. Desegregation is considered to be more beneficial for the higher achieving minority pupils than for the lower achiever. There is also said to be a significant correlation between the average achievement of bused and receiving pupils. (Author/DM)

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RIVERSIDE UNIFIED SCHOOL DISTRICT
Riverside, California

DEPARTMENT OF RESEARCH AND EVALUATION
March, 1970

A REPORT ON THE ACHIEVEMENT OF ELEMENTARY PUPILS IN INTEGRATED SCHOOLS

McAteer Project M9-14

UD010597

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RIVERSIDE UNIFIED SCHOOL DISTRICT
Riverside, California

DEPARTMENT OF RESEARCH AND EVALUATION
March, 1970

Abstract
of
A REPORT ON THE ACHIEVEMENT OF ELEMENTARY PUPILS IN INTEGRATED SCHOOLS[1]

Four years after the beginning of a program of school desegregation through which pupils of minority ethnic backgrounds are bused to schools in predominantly majority neighborhoods, the average reading achievement test scores of the bused pupils have increased at some grade levels, changed little at others, and decreased at still others. The same trends are evident among the receiving pupils and among pupils attending schools which were not affected by desegregation. Therefore, the changes which have occurred are probably due to factors other than desegregation, such as a district-wide effort to improve reading achievement. The grade levels at which the average test scores have decreased, grades 4-6, were tested prior to this concentrated effort.

The average readiness test scores of kindergarten pupils in all three groups (bused, receiving, and non-receiving) in 1969 continued an upward trend which, except for a decrease among bused pupils in 1968, has been evident since 1967. First, second, and third grade pupils in the three groups also scored higher in 1969 than in 1968, reversing a general downward trend. Bused pupils in the first grade had shown only a slight decrease in their average reading achievement test performance; the increase was sufficient to bring the 1969 average above the 1966 average. The scores of the second and third grade bused pupils had decreased more; the reversal brought them to slightly above (grade 2) and slightly below (grade 3) the 1966 averages.

Desegregation seems to be more beneficial for the higher achieving minority pupils than for the lower achievers, a confirmation of the "taking the lid off" effect mentioned in the 1967 report. A comparison of 1968 and 1969 10th, 25th, 50th, 75th and 90th percentiles reveals that, while pupils at all levels scored higher in 1969, pupils at the 75th and 90th percentiles gained more than did pupils at lower levels. Also, the highest test scores achieved by the bused pupils were higher in 1969 than in any prior year.

As in 1968, there was a significant correlation between the average achievement of bused and receiving pupils. That is, pupils bused to schools with high achieving receiving pupils usually had higher average test scores

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[1]Funds for this project were granted by the Office of Compensatory Education, California State Department of Education, under provisions of the McAteer Act.

than did pupils bused to schools with low achieving receiving pupils. Certain school factors seem to have similar effects on the achievement of both the bused and the receiving pupils. It is likely that these factors are the socioeconomic backgrounds of the receiving pupils and classroom effects such as the instructional program, pupil motivation, etc.

The average achievement of fourth and fifth grade pupils, the only grades for which actual pre-desegregation data are available, was higher before desegregation than after one to two years of desegregation. Again, this was also true of non-receiving pupils so it may be due to factors other than school desegregation. Pupils in the sixth grade also scored lower in the fall of 1968 than the previous year. As mentioned earlier, fourth, fifth, and sixth grade pupils were tested prior to the district-wide effort to increase reading achievement. Hopefully, the downward trend has been reversed.

A REPORT ON THE ACHIEVEMENT OF ELEMENTARY PUPILS IN INTEGRATED SCHOOLS

Introduction

Four years after the Riverside Unified School District began busing pupils of minority ethnic backgrounds to effect school desegregation, the average reading achievement test scores of the bused pupils have increaseed at some grade levels, changed little at others, and decreased at still others. The same trends are evident among the receiving pupils and among pupils attending schools which were not affected by desegregation. Therefore, the changes which have occurred are probably due to factors other than desegregation, such as a district-wide effort to improve reading achievement. The grade levels at which the average scores have decreased, grades 4-6, were tested prior to this concentrated effort.

Desegregation was accomplished by closing three schools which were virtually one hundred per cent minority (Mexican-American and Negro) and assigning the pupils to schools in predominantly majority neighborhoods. The program began in the fall of 1965; all pupils had been desegregated by the fall of 1967. Schools with relatively low percentages of minority pupils were selected as receiving schools. The distances involved required the busing of most pupils; however, approximately five per cent of the primary grade pupils and fifteen per cent of the pupils in grades four through six live within walking distance of the receiving schools. They are included with the bused pupils in this report. Also included are a few pupils (25-30 at each grade level) who were bused from two other schools at which changing neighborhood patterns have increased the proportion of minority pupils to more than fifty per cent.

In addition to the bused pupils, this report contains data for receiving pupils and pupils at non-receiving schools. Receiving pupils are children who attend the sixteen receiving schools because they live in those neighborhoods. Thus, the receiving pupil population is the total school population minus the bused pupils. Pupils at non-receiving schools attend eight schools which were not selected as receiving schools because the minority ethnic populations equalled or exceeded the district percentage of 16.7. These eight schools include the two schools mentioned above which are approximately fifty per cent minority.

Achievement, in this report, refers to performance on the following tests:

Kindergarten: Metropolitan Readiness Tests

Grades 1, 2, 3, and 6: Stanford Reading Tests - Total Reading Score (a composite of the Word Reading/Meaning and Paragraph Meaning Tests)

Grades 4 and 5: Sequential Tests of Educational Progress - Reading Test

In kindergarten through grade three, these tests were first administered in the spring of 1966, after approximately one-third of the bused pupils had attended desegregated schools for almost one school year. Fourth and fifth grade pupils have taken the tests since 1963. Sixth grade pupils were first administered the Stanford tests in the fall of 1966. The fourth and fifth grades are therefore the only grades for which actual pre-desegregation data are available. The change in test instruments at the other grades resulted from a State mandated testing program.

Primary Pupils

The average readiness test scores of kindergarten pupils in all three groups (bused, receiving, and non-receiving) in 1969 continued an upward trend which, except for a decrease among bused pupils in 1968, has been evident since 1967 (Appendix, Table 1). As the average score of the bused pupils has increased, the proportion of pupils who should experience difficulty with first grade work has decreased. The publisher of the readiness tests estimates that pupils who score below a certain level are likely to experience difficulty. In 1967, 66 per cent of the bused pupils scored below this level, as compared to 31 per cent of the pupils in the publisher's sample and 20 per cent of the receiving pupils. In 1969, the per cent of bused pupils scoring below that level had declined to 56, a figure that is still too high but may be indicative of an encouraging trend.

The average reading achievement test scores of all three groups of pupils in the first, second, and third grades were higher in 1969 than in 1968, reversing a general downward trend (Appendix, Table 1). The decrease in the average score of the first grade bused pupils had been slight; the increase was sufficient to bring the 1969 average above the 1966 average. The scores of the second and third grade bused pupils had decreased more; the reversal brought them to slightly above (grade 2) and slightly below (grade 3) the 1966 averages.

In both 1968 and 1969, there was a wide variation in the average performance of bused pupils attending different receiving schools (Appendix, Tables 2-5). Some of the variations seemed to be random, or limited to one grade level at a particular school. For example, the average score of first grade pupils bused to Palm School was 43.38, in comparison to 28.98 for all first grade bused pupils; second graders bused to Palm had an average score of 25.17 in comparison to 31.79 for all second grade bused pupils. Other variations were more consistent; the two extreme

examples are Alcott and Pachappa. Pupils bused to Alcott scored higher than other bused pupils at every grade level. Except in grade five, pupils bused to Pachappa scored lower than pupils bused elsewhere.

Fluctuations between the 1968 and 1969 average scores of the bused pupils attending many schools were also great. For example, the average score of kindergarten pupils bused to Victoria increased from 22.18 in 1967 to 58.50 in 1968 and decreased to 40.42 in 1969. Differences such as these are probably due to the fact that they represent different children (as the number of children involved is quite small, the mean scores are easily influenced by individual differences) and to varying classroom effects.

It appears that, as mentioned in the 1967 report, desegregation is more advantageous for high achieving minority pupils than for the lower achievers. A comparison of 1968 and 1969 10th, 25th, 50th, 75th, and 90th percentiles reveals that, while pupils at all levels scored higher in 1969, pupils at the 75th and 90th percentiles gained more than did pupils at lower levels. Also, the upper ends of the ranges of first, second, and third grade bused pupils were higher in 1969 than in any prior year (Appendix, Table 6).

Percentiles for pupils attending segregated schools in 1966 were compared with percentiles for pupils who were bused from the same areas to integrated schools in 1969 (Appendix, Table 7). The data indicate that, with the exception of third grade pupils, the performance of high achieving minority pupils has improved more than has the performance of low achieving minority pupils. Third grade pupils performed lower at all levels in 1969 than in 1966.

Tests of statistical significance were applied to proportions of students scoring at or above the 1966 ninetieth percentile in 1966 and in 1969. Significantly more kindergarten, first, and second grade pupils had high reading achievement test scores in 1969 than in 1966. However, significantly fewer third grade pupils had high scores in 1969 than in 1966.

Data for the bused pupils were analyzed by their ethnic backgrounds and by the nieghborhoods from which they were bused (the schools they would have attended prior to desegregation). Differences between the two ethnic groups were slight and were not consistent. At some grade levels, the average score of the black students was higher; at other grade levels, the average score of the Mexican-American students was higher. Differences between pupils from different neighborhoods were not significant, but were somewhat consistent, probably due to socioeconomic differences.

During the analysis of the 1968 data, it was observed that the average scores of pupils bused to different schools varied considerably. This led to the finding, reported last year, that a positive and significant correlation exists between the average reading test scores of bused and receiving pupils attending the various schools. That is, if

the average score of the receiving pupils at a particular school is high in comparison with all receiving pupils, the average score of the bused pupils at that school is likely to be high in comparison with all bused pupils. If the average score of the receiving pupils is low, the average score of the bused pupils is likely to be low also. This indicates that certain factors, operating within the schools, have similar effects on the achievement of bused pupils and receiving pupils, causing them to achieve either higher or lower than pupils attending other schools. However, it was suspected that the correlations were at least partially due to a correlation between the socioeconomic backgrounds of the two groups. That is, it was suspected that the bused pupils with higher socioeconomic backgrounds than most other bused pupils attended schools in which the receiving pupils were of high socioeconomic backgrounds and the lower socioeconomic bused pupils attended receiving schools in lower socioeconomic neighborhoods. This would have explained the correlations. Data were not readily available last year for testing this suspicion.

This year, when significant correlations were again found between the average achievement of bused and receiving pupils (Appendix, Table 8), socioeconomic data[1] were available. The correlations were then re-calculated, partialling out the effects of the socioeconomic status of the bused pupils (Appendix, Table 9). Significant correlations remained at the kindergarten, first, and third grades. The second grade correlation was lower, a phenomenon that was previously observed when similar correlations were calculated for all schools in the district and which has not yet been explained.

Thus, beyond the influence of the socioeconomic status of bused pupils on their average achievement, certain factors operating within the schools have significant and similar effects upon the average achievement of both the bused pupils and the receiving pupils. These factors seem to be the socioeconomic backgrounds of the receiving pupils and classroom effects, such as the instructional program, pupil motivation, etc.

While these correlations are interesting, and might have some program implications, they help explain only the variations in <u>average</u> test scores of pupils attending different schools. Test scores of individual pupils attending any one school vary much more than do the average scores of the several schools. These latter variations are much more difficult to explain. However, they are also more easily changed. As average scores are composed of individual scores and seem to be affected by the socioeconomic backgrounds of the receiving pupils and by somewhat elusive classroom effects, it seems logical that the achievement of bused pupils would improve if they were bused only to schools at which the average achievement of receiving pupils at most grade levels is at least as high as the district-wide average.

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[1]Using the occupation of the head of the household, socioeconomic index codes were assigned to each child. The coding scheme, developed by Otis Dudley Duncan, may be found in <u>Occupations and Social Status</u> by Albert J. Reiss, Jr.

Intermediate Pupils

Bused, receiving, and non-receiving pupils in the fourth, fifth, and sixth grades performed less well on standardized reading achievement tests in the fall of 1968 than the previous year (Appendix, Tables 10-12). As mentioned previously, the tests were given prior to a district-wide effort to improve reading achievement.

The average achievement of fourth and fifth grade pupils, the only grades for which pre-desegregation data are available, was higher before desegregation than after one to two years of desegregation. Again, as this was true of pupils attending schools not affected by desegregation as well as bused and receiving pupils, it must not be due to school desegregation.

Results of the analyses of the achievement of bused pupils from different ethnic backgrounds and home neighborhoods were similar to primary grade results. Differences were not significant and were less consistent than in the primary grades.

Correlations between the average scores of fourth grade bused and receiving pupils were significant; correlations between fifth and sixth grade bused and receiving pupils were very low and were not significant.

Conclusions

One to four years of experience in desegregated schools seems to have had little, if any, effect on the average performance on achievement tests of either bused or receiving pupils. Although the average scores of pupils in the lower grades have improved, so have the average scores of pupils attending schools not affected by the desegregation program. However, perhaps desegregation has served to heighten the awareness of school teachers and administrators of the importance of academic achievement and has led to innovative programs to meet widely diverging needs which have spread to other schools in the district and which, in turn, caused the general upward trend.

Two findings of this year's analysis seem to have particular import. First, attending desegregated schools seems to be more beneficial for high achieving bused pupils than for others, a confirmation of the "taking the lid off" effect mentioned in the 1967 report. Second, attending schools with high achieving receiving pupils seems to lead to higher performance of bused pupils.

Funds for this project were granted by the Office of Compensatory Education, California State Department of Education under provisions of the McAteer Act.

APPENDIX

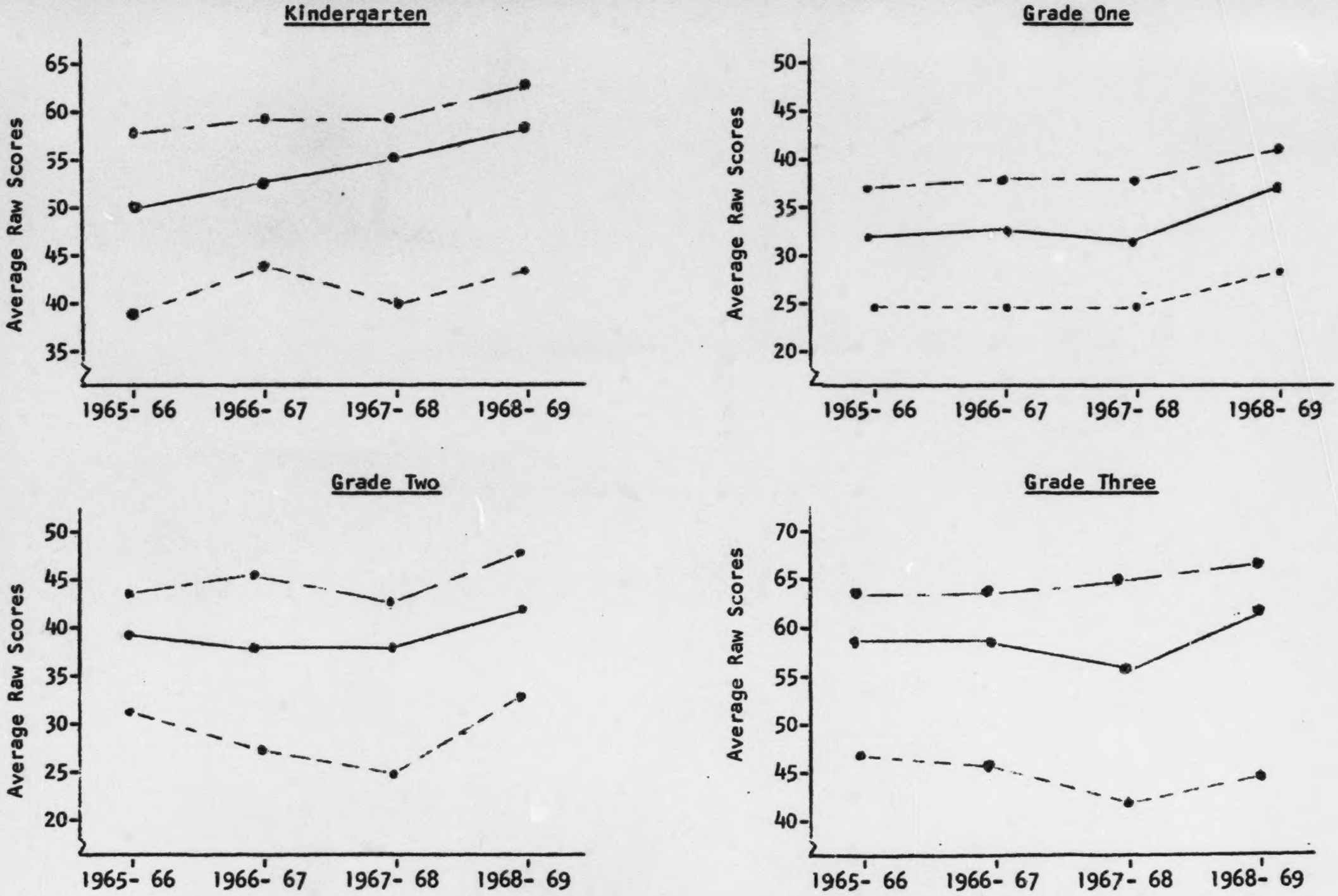
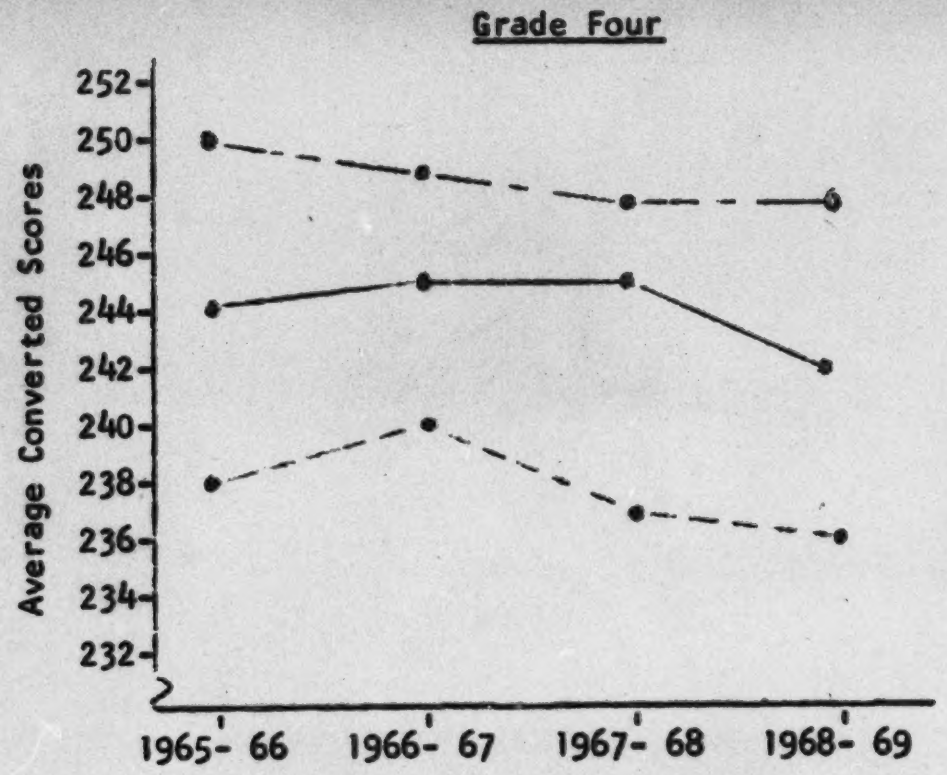
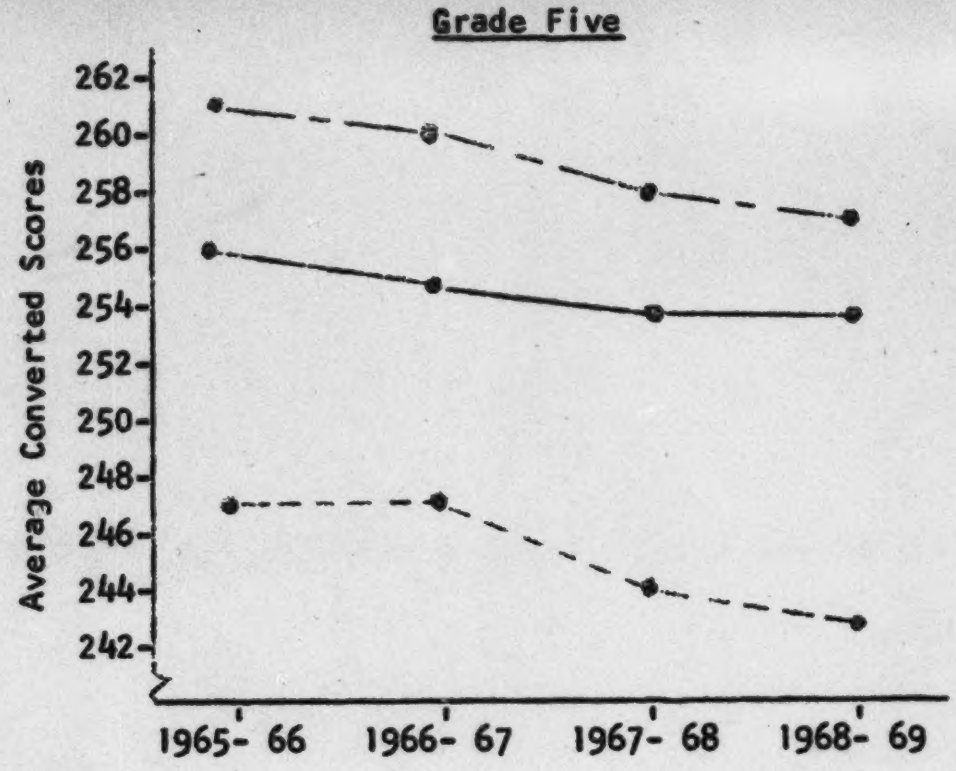


Fig. 1.--Average achievement test scores, kindergarten - grade three, 1965-1966 through 1968-1969.

Legend: — — — — Bused Pupils — — — — Receiving Pupils ——— Non-Receiving Pupils





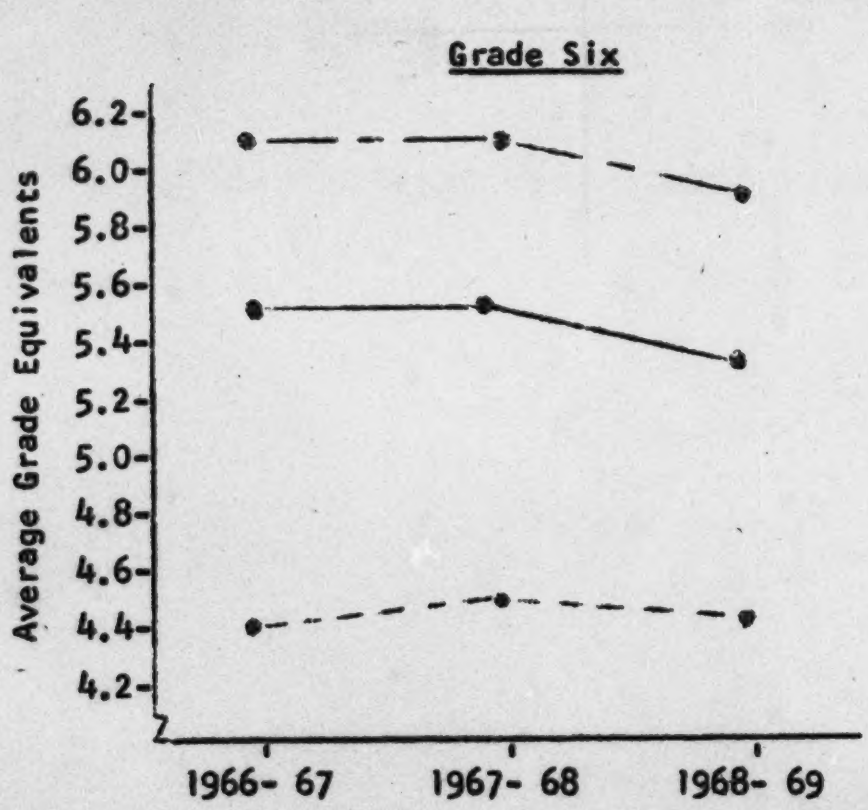


Fig. 2.--Average achievement test scores, grades four - six, 1965-1966 through 1968-1969.

Legend:

- - - - - - Bused Pupils

—— - —— Receiving Pupils

———— Non-Receiving Pupils

TABLE 1

AVERAGE ACHIEVEMENT TEST SCORES, KINDERGARTEN - GRADE SIX
1965-1966 THROUGH 1968-1969

	1965 - 1966		1966-1967		1967-1968		1968-1969	
	Mean Raw Score	%ile or Grade Equiv.	Mean Raw Score	%ile or Grade Equiv.	Mean Raw Score	%ile or Grade Equiv.	Mean Raw Score	%ile or Grade Equiv.
Kindergarten								
Bused Pupils	39	22	44	29	40	23	44	29
Receiving Pupils	58	57	59	59	59	59	63	67
Non-Receiving Pupils	50	40	53	46	55	51	58	57
District	54	48	56	53	57	55	59	59
Grade One								
Bused Pupils	25	1.5	25	1.5	25	1.5	29	1.6
Receiving Pupils	37	1.7	38	1.7	38	1.7	42	1.8
Non-Receiving Pupils	32	1.6	33	1.6	31	1.6	37	1.7
District	34	1.7	36	1.7	35	1.7	39	1.7
Grade Two								
Bused Pupils	31	2.1	28	2.0	25	1.9	32	2.2
Receiving Pupils	44	2.7	45	2.7	43	2.6	48	2.8
Non-Receiving Pupils	39	2.5	37	2.4	37	2.4	41	2.6
District	42	2.6	41	2.6	40	2.5	44	2.7
Grade Three								
Bused Pupils	47	2.8	46	2.7	42	2.6	45	2.7
Receiving Pupils	64	3.5	64	3.5	65	3.5	66	3.6
Non-Receiving Pupils	59	3.2	59	3.2	56	3.1	61	3.3
District	. .	. .	61	3.3	60	3.3	62	3.4
Grade Four								
Bused Pupils	238	21	240	30	237	15	236	13
Receiving Pupils	250	89	249	87	248	83	248	83
Non-Receiving Pupils	244	57	245	62	245	62	242	47
District	247	76	247	76	246	68	245	62
Grade Five								
Bused Pupils	247	21	247	21	244	17	243	15
Receiving Pupils	261	89	260	87	258	77	257	72
Non-Receiving Pupils	256	71	255	70	254	57	254	57
District	257	72	257	72	256	71	255	70
Grade Six								
Bused Pupils	. .	. .	. .	4.4	. .	4.5	. .	4.4
Receiving Pupils	. .	. .	. .	6.1	. .	6.1	. .	5.9
Non-Receiving Pupils	. .	. .	. .	5.5	. .	5.5	. .	5.3
District	. .	. .	. .	5.7	. .	5.8	. .	5.6

TABLE 2

AVERAGE RAW SCORES ON METROPOLITAN READINESS TESTS
KINDERGARTEN, MAY 1968 AND MAY 1969

School	Bused Pupils				Receiving Pupils			
	May 1968		May 1969		May 1968		May 1969	
	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score
Adams	12	36.50	10	46.70	80	52.41	82	56.50
Alcott	10	52.10	11	58.27	67	70.72	56	70.11
Bryant	3	. .	6	47.33	49	61.82	34	60.85
Castle View	4	. .	8	44.62	39	65.79	36	62.08
Highland	6	45.17	5	52.00	120	67.31	119	67.15
Hyatt	6	37.17	7	43.43	58	59.14	51	66.18
Jackson	16	42.19	14	42.14	137	56.85	112	61.00
Jefferson	23	38.74	24	42.96	102	57.21	92	62.93
Liberty	9	28.78	10	48.80	77	55.06	57	61.77
Madison	9	45.22	11	44.09	61	61.49	66	61.76
Magnolia	15	37.47	20	41.20	91	58.38	78	59.71
Monroe	6	23.33	23	46.48	112	54.07	101	63.12
Pachappa	7	26.14	11	21.64	26	55.85	36	54.61
Palm	7	47.86	6	44.33	51	56.02	37	53.86
Victoria	10	58.50	19	40.42	51	69.04	39	70.79
Washington	12	38.17	14	44.64	80	55.50	71	63.46
Total	155	40.41	199	43.70	1201	59.36	1067	62.52

Note:

Throughout this report, average scores of groups of less than five pupils have been omitted.

TABLE 3

AVERAGE STANFORD TOTAL READING RAW SCORES
GRADE ONE, MAY 1968 AND MAY 1969

School	Bused Pupils				Receiving Pupils			
	May 1968		May 1969		May 1968		May 1969	
	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score
Adams	14	27.14	15	31.20	92	36.63	86	41.69
Alcott	8	42.38	22	38.14	78	48.40	85	51.28
Bryant	4	. .	7	24.43	36	36.33	45	40.89
Castle View	6	19.00	8	21.25	39	40.82	46	39.43
Highland	3	. .	8	24.88	99	41.70	124	41.59
Hyatt	6	26.83	8	23.00	52	44.08	63	44.87
Jackson	26	25.27	25	23.52	137	35.26	132	40.16
Jefferson	16	19.75	19	34.53	112	33.39	96	43.93
Liberty	10	31.50	11	33.27	65	39.94	74	38.19
Madison	17	25.00	10	30.90	78	35.12	59	45.83
Magnolia	14	22.21	23	27.35	95	36.51	93	38.86
Monroe	21	23.33	23	23.22	91	36.36	98	37.83
Pachappa	9	18.89	12	21.58	38	28.58	30	37.70
Palm	1	. .	8	43.38	43	43.91	54	41.87
Victoria	16	28.25	20	31.55	59	41.30	41	50.78
Washington	9	25.33	15	28.73	70	34.89	80	42.66
Total	180	25.41	234	28.98	1184	38.01	1206	42.15

TABLE 4

AVERAGE STANFORD TOTAL READING RAW SCORES
GRADE TWO, MAY 1968 AND MAY 1969

School	Bused Pupils				Receiving Pupils			
	May 1968		May 1969		May 1968		May 1969	
	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score
Adams	12	26.58	21	36.52	105	39.44	80	50.54
Alcott	13	37.69	8	36.00	89	49.35	82	53.26
Bryant	3	. .	4	. .	45	41.82	40	53.45
Castle View	10	31.00	8	24.62	39	48.08	53	50.19
Highland	5	35.40	5	26.40	98	50.21	101	46.23
Hyatt	5	23.00	8	29.38	49	46.98	54	54.50
Jackson	21	24.95	23	31.26	96	41.03	118	44.90
Jefferson	23	21.26	13	24.62	106	38.43	113	43.24
Liberty	9	28.44	9	28.22	64	40.50	72	45.57
Madison	10	26.10	18	37.33	71	39.84	67	56.21
Magnolia	13	22.69	9	43.67	69	44.62	86	48.00
Monroe	19	15.74	26	28.27	107	38.96	101	42.30
Pachappa	8	18.25	11	26.27	48	40.25	37	41.86
Palm	6	26.50	6	25.17	38	45.76	54	47.63
Victoria	20	23.60	18	37.00	76	49.91	63	57.89
Washington	9	27.00	11	29.18	82	44.72	67	41.12
Total	186	24.90	198	31.79	1182	43.42	1188	47.96

TABLE 5

AVERAGE STANFORD TOTAL READING RAW SCORES
GRADE THREE, MAY 1968 AND MAY 1969

School	Bused Pupils				Receiving Pupils			
	May 1968		May 1969		May 1968		May 1969	
	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score	Number	Mean Raw Score
Adams	12	42.33	16	45.12	85	60.25	107	62.87
Alcott	14	43.57	17	57.71	82	74.84	88	74.51
Bryant	5	42.20	6	38.83	49	59.84	44	58.75
Castle View	4	. .	12	50.75	52	65.65	54	69.35
Highland	5	47.00	11	48.55	106	69.32	95	70.94
Hyatt	5	46.60	7	53.14	61	71.25	50	72.38
Jackson	22	37.27	19	46.32	131	63.95	91	61.88
Jefferson	23	40.83	22	46.00	102	60.09	109	65.89
Liberty	4	. .	11	40.55	60	54.07	70	56.46
Madison	11	46.18	9	54.00	74	64.46	67	65.45
Magnolia	14	47.43	20	43.05	86	67.73	64	64.45
Monroe	16	33.81	19	36.53	93	60.57	97	61.38
Pachappa	8	33.00	15	36.80	47	62.19	46	64.35
Palm	5	42.60	6	41.67	57	62.35	46	65.65
Victoria	16	48.25	19	40.37	80	74.45	73	67.52
Washington	14	43.29	12	53.33	79	61.85	79	68.58
Total	178	42.00	221	45.43	1244	64.79	1180	65.70

TABLE 6

RANGES OF ACHIEVEMENT TEST SCORES, BUSED PUPILS, KINDERGARTEN - GRADE THREE MAY 1967 - MAY 1969

Grade and Year	Raw Scores	Percentiles or Grade Equivalents
Kindergarten		
1967	8-97	<1->99
1968	8-83	<1-97
1969	5-83	<1-97
Grade One		
1967	. .	<1.0-2.5
1968	0-70	<1.0-3.1
1969	6-72	1.0-3.6
Grade Two		
1967	. .	1.2-3.5
1968	0-62	<1.0-3.4
1969	3-75	1.2-4.1
Grade Three		
1967	. .	1.4-5.5
1968	0-88	<1.0-5.9
1969	7-90	1.4-6.4

TABLE 7

RAW SCORE CENTILE POINTS, ACHIEVEMENT TEST SCORES, PRIMARY GRADE SEGREGATED PUPILS IN 1966 AND SELECTED[a] DESEGREGATED PUPILS IN 1969

Centile Rank[b]	Kindergarten		Grade One		Grade Two		Grade Three	
	1966	1969	1966	1969	1966	1969	1966	1969
10	23-24	27	13-14	13	19-20	15	28	23
25	32	31	17-18	18	23-24	19	37	30
50	42	41	21-22	25	31-32	28	48	42
75	50	55	29-30	36	37-38	41	59	54
90	53-54	62	37-38	46	47-48	54	69	64

[a] Includes only pupils from areas of schools which were segregated in Spring 1966. Thus, all kindergarten pupils from Casa Blanca were included, as were all first, second, and third grade pupils from Casa Blanca and Irving.

[b] A centile rank is a position at or below which a certain percentage of pupils scored. For example, ten per cent of the pupils scored at or below the tenth centile rank.

TABLE 8

CORRELATIONS BETWEEN THE ACHIEVEMENT OF BUSED PUPILS AND RECEIVING PUPILS

Grade	r
Kindergarten	.5549
Grade One	.5396
Grade Two	.4463
Grade Three	.7793

TABLE 9

CORRELATIONS BETWEEN THE ACHIEVEMENT OF BUSED PUPILS AND RECEIVING PUPILS PARTIALLING OUT THE SOCIOECONOMIC STATUS OF THE BUSED PUPILS

Grade	r
Kindergarten	.6852
Grade One	.5178
Grade Two	.4263
Grade Three	.7423

TABLE 10

AVERAGE CONVERTED SCORES, SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS, READING TEST GRADE FOUR, FALL 1968

School	Bused Pupils		Receiving Pupils	
	Number	Mean	Number	Mean
Adams	22	236.50	82	243.28
Alcott	17	235.06	84	255.40
Bryant	8	232.12	38	241.42
Castle View	9	235.33	55	247.31
Highland	6	240.67	96	250.34
Hyatt	2	. .	61	250.18
Jackson	25	237.40	121	247.00
Jefferson	19	238.32	97	247.22
Liberty	9	233.89	56	244.25
Madison	11	237.64	76	247.49
Magnolia	11	235.64	88	249.07
Monroe	18	235.72	91	241.74
Pachappa	7	232.57	40	242.25
Palm	9	233.89	59	244.73
Victoria	21	238.67	75	257.15
Washington	13	231.92	79	245.24
Total	207	236.11	1198	247.52

TABLE 11

AVERAGE CONVERTED SCORES, SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS, READING TEST GRADE FIVE, FALL 1968

School	Bused Pupils		Receiving Pupils	
	Number	Mean	Number	Mean
Adams	13	244.08	86	256.29
Alcott	14	248.29	90	263.02
Bryant	5	232.40	48	253.15
Castle View	5	243.60	62	263.34
Highland	6	243.83	89	260.80
Hyatt	7	236.14	57	257.72
Jackson	24	244.96	119	254.46
Jefferson	15	240.27	126	252.67
Liberty	1	. .	73	259.14
Madison	7	242.43	66	254.89
Magnolia	11	238.09	76	255.95
Monroe	21	245.43	106	254.69
Pachappa	8	255.25	45	255.44
Palm	6	247.00	45	257.78
Victoria	12	241.33	67	265.00
Washington	12	240.33	67	252.01
Total	167	243.42	1222	257.07

TABLE 12

AVERAGE STANFORD TOTAL READING RAW SCORES
GRADE SIX, FALL 1968

School	Bused Pupils		Receiving Pupils	
	Number	Mean	Number	Mean
Adams	17	40.53	86	55.35
Alcott	11	42.82	93	68.31
Bryant	6	36.00	25	50.24
Castle View	6	37.67	53	69.32
Highland	4	. .	92	61.00
Hyatt	4	. .	56	62.70
Jackson	14	36.71	119	52.69
Jefferson	15	35.93	112	55.08
Liberty	9	36.78	56	55.62
Madison	11	34.73	83	54.65
Magnolia	13	34.92	84	54.75
Monroe	24	32.33	117	54.62
Pachappa	10	34.00	51	57.84
Palm	5	54.40	52	54.60
Victoria	19	36.68	93	66.33
Washington	8	36.38	86	56.66
Total	176	36.84	1258	58.09